

PATENT  
Docket No. 425802000200

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Amy E. BAKER

Serial No.: 09/557,187

Filing Date: April 21, 2000

For: SALICYLIC ACID ACNE SPRAY  
FORMULATIONS AND METHODS  
FOR TREATING ACNE WITH SAME

Examiner: G. Yu

Group Art Unit: 1619

**DECLARATION OF HOWARD MAIBACH, M.D. UNDER 37 C.F.R § 1.132**

Mail stop A/F  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

I, Howard Maibach, declare that:

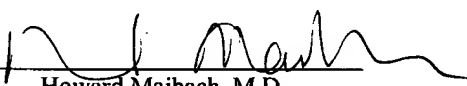
1. I received my M.D. from Tulane University in 1955 and have specialized in dermatology since 1961.
2. A true copy of my curriculum vitae minus publications is attached hereto.
3. I have read the following:
  - a) the subject application, including the claims as amended
  - b) the September 10, 2002 Office Action in the subject application, including the Fitzjarrell, Briggs et al. and Guang Lin et al. patents cited therein.
  - c) the March 10, 2000 Amendment in the subject application
  - d) the June 4, 2003 Office Action in the subject application

4. I consulted with the inventor of the subject application, Amy Baker, regarding the development and testing of the fine mist salicylic acid spray that is described in the subject application and am familiar with that spray.
5. I believe that one of ordinary skill in the art relating to anti-acne compositions would not consider the fine mist salicylic acid spray of the claims of the subject application to be obvious in view of the combined teachings of the Fitzjarrell, Briggs et al. and Guang Lin et al. patents for the following reasons:
  - a) While salicylic acid has been recognized as a safe and effective anti-acne agent for a long time, I have not known it to be described or used previously as a fine mist spray for treating non-facial acne. In this regard body acne often occurs on the back, which is a difficult site to reach for many people and I believe it was very clever of Ms. Baker to conceive of applying salicylic acid as a fine mist spray which could be easily directed to the back and which would not unduly wet the applied area.
  - b) Ms. Baker's clinical trial of her initial fine mist spray formulation of salicylic acid was unsuccessful because the patients experienced undue nasal irritation and coughing. In this regard it was not obvious to me, nor do I believe it would have been obvious others, that the pH of her initial formulation was causing such irritation and coughing or that increasing the pH of the formulation-- as Ms. Baker ultimately did-- would significantly reduce these symptoms.
  - c) With respect to the Fitzjarrell patent mentioned above, it describes topical sprays of niacinamide which can be applied directly to the facial area to allegedly treat acne. Unfortunately, I believe the clinical trials of niacinamide showed that it was not effective for treating acne. I therefore believe niacinamide is a poor starting point for concluding anything about efficacy for treating acne. In any event this patent says nothing about fine mist sprays and only mentions salicylic acid as an anti-acne treatment in the context of creams, not fine mist sprays. It also says nothing about the irritation/coughing problem experienced by Ms. Baker or how that problem might be solved. Ms. Baker's fine mist sprays are indicated for treating body acne, not facial acne, in order to reduce the likelihood of the mist being inhaled. In contrast, Fitzjarrell specifically recommends his formulations for use on the face. This is a further indication that Fitzjarrell's teachings are unrelated to fine mist sprays of salicylic acid.

- d) As regards the Briggs et al. and Guang Lin et al. patents, they describe anti-acne formulations of salicylic acid but do not mention fine mist sprays. While both mention that a broad range of pHs may be used in their formulations, both prefer lower pHs--which, as indicated above would not be suitable for fine mist sprays of salicylic acid. This clearly indicates that neither of these patents anticipated the irritation/coughing problem encountered by Ms. Baker or the solution thereto. In this regard, I disagree with the conclusion reached in the June 4, 2003 Office Action that the reduction in nasal irritation and coughing at pHs above 5 is an obvious property of the solution. It is only when the solution is administered as a fine mist spray that this problem exists and none of the three patent references referred to above describes fine mist sprays of salicylic acid.
- e) In view of the difficulties with nasal irritation and coughing associated with administering fine mist sprays of salicylic acid, I disagree with the June 4, 2003 Office Action's contention that there was an expectation that one could successfully produce a spray, particularly a fine mist spray, of salicylic acid by replacing niacinamide with salicylic acid in the Fitzjarrell composition.
6. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

9/26/03  
Date

Name:  
Address:

  
Howard Maibach, M.D.  
2745 Larkin Street  
San Francisco, CA 94109

UNIVERSITY OF CALIFORNIA  
DEPARTMENT OF DERMATOLOGY

CURRICULUM VITAE

HOWARD IRA MAIBACH, M.D.

PRESENT TITLE                      Professor

PERSONAL                      Date of Birth: July 18, 1929  
Place of Birth: New York, New York

<u>EDUCATION</u>	<u>From - To</u>	<u>DEGREE</u>	<u>YEAR</u>
Tulane University	1947-1950	A.B.	1950
Columbia University	1950-1951		
Tulane University	1951-1955	M.D.	1955

POSTGRADUATE TRAINING

<u>INSTITUTION</u>	<u>TITLE</u>	<u>From - To</u>
William Beaumont Army Hospital, El Paso, TX	Intern	1955-1956
Fellowship, USPHS, Hospital of the University of Pennsylvania	Fellow	1959-1961
Walter Reed Army Hospital (Neuropsychiatry)		Jul - Nov 1956

POSITIONS HELD AFTER COMPLETION OF GRADUATE TRAINING

*Outside of the University of California, School of Medicine*

<u>Institution</u>	<u>Title</u>	<u>From-To</u>
University of Pennsylvania, School of Medicine	Assistant Instructor	1958-1961
University of Pennsylvania, Graduate School of Medicine	Lecturer	1960-1961
University of California Hospitals	Private Practice	1961-present

*Inside the University of California, School of Medicine*

<u>Institution</u>	<u>Title</u>	<u>From-To</u>
Dermatology	Assistant Professor	1961-1966
Dermatology	Associate Professor	1967-1973
Cancer Research Institute	Research Associate	1967-present
Dermatology	Professor	1973-present
University of California, Faculty Club	Senior Member, Board of Directors	1979-1980
Dermatology	Vice Chairperson	1973-present
Ad Hoc Peer Review Committee	Academic Vice Chancellor	1983-present
Subcommittee on Quality of Care	Senior Member	1983-present
Occupational Dermatology Clinic	Chief	1984-present

SERVICE

Active Staff, University of California - H. C. Moffitt Hospital                      1961 - present

Consultant In Dermatology, Laguna Honda Hospital (Chief, Dermatology Service, 1963-1967)	1962 - 1970
Consultant in Dermatology, Letterman General Hospital, San Francisco	1962 - 1991
Consultant in Dermatology, California Medical Facility, Vacaville, CA	1962 - present
Consultant in Dermatology, San Francisco General Hospital, S.F.	1962 - present
Consultant in Dermatology, Sonoma State Hospital, Eldridge, CA	1962- 1964
Stanford Research Institute, Menlo Park, CA	1962 - present

State of California Dept. Public Health, Berkeley, California	1962-present
Consultant in Dermatology, Veterans Administration Hospital, S.F.	1963-present
Consultant, Research Institute for Fragrance Materials, Inc.	1967 - 1970
International Contact Dermatitis Research Committee	1968 - present
Consultant, David Grant USAF Hospital, Travis AFB, California	1968 - 1986
Consultant, Naval Hospital, San Diego, California	1970 - 1987
Consultant, Wilford Hall AFB, Texas	1972 - present
Consultant, U.S. Army Environmental Health Agency, Maryland	1972 - present
Limitations of Subchronic Toxicity Studies, EPA	1979 - 1980
Consultant to The Department of the Air Force	1979 - 1980
Committee on Toxicology	1979 - 1981
UCSF Faculty Club (Board of Directors, 1979-1980)	1979 - 1982
Consultant in Dermatology-Letterman Army Medical Ctr., San Francisco	1979 - 1986
Consultant in Dermatology-International Psoriasis Treatment Center, Dead Sea	1979 - present
Consultant to the American Medical Association re: AMA <u>Drug Evaluations</u>	1979 - present
American Society for Clinical Pharmacology and Therapeutics	1980
Committee on Drugs/Program Committee	
Consultant to the Department of the Navy	1980 - 1981
Consultant to A Dentists Medical Digest	1980 - present
Consultant and Final Reviewer, American Medical Association: AMA <u>Drug Evaluations</u>	1980 - present
The Pharmacy and Therapeutics Committee	1980 - present
Vice Chairperson of the Department of Dermatology, School of Medicine	1980 - present
The American Dermatological Association, Inc. Annual Meeting	1981
Subsidiary Corporation of the Academy, American Academy of Dermatology	1981
Committee on Clinical Disorders, American Academy of Dermatology	1981
American Dermatological Association, Inc. Program Committee	1981
Chairman of the group, Task Force from the American Academy of Dermatology	1981 - 1982
American Academy of Dermatology	1981 - 1982
Committee on Drugs and Coordination of Scientific Sections	1981 - 1982
American Academy of Dermatology Committee on International Affairs	1981 - 1984
Task Force on Contact Dermatology, American Academy of Dermatology	1981 - 1984
Task Force on Infectious Diseases, American Academy of Dermatology	1981 - 1984
Task Force on Comparative Dermatology, American Academy of Dermatology	1981 - present
International Committee, International League of Dermatological Societies	1981 - present
Consultant to a Committee of the AMA to revise the guides to Permanent Impairment of the Skin	1981 - present
UCSF Pharmacy & Therapeutics Committee, Hospital Formulary Revision Panel	1984 - present
International Society for Bioengineering and the Skin Standardization Committee	1985 - present
American Academy of Derm., Comm. for Curriculum on Cosmetics in Dermatology	1985 - present
UCSF Pharmacy & Therapeutics Committee, Hospital Formulary Revision Panel	1987 - 1989
Personnel Ad Hoc Review Committees, by request of Senior Vice Chancellor of Academic Affairs	1991-1992

## TEACHING

Introduction to Clinical Medicine	1968-1992
Family & Community Medicine	1970-present

Intensive Residency in Occupational Medicine, Session I	Sept. 3, 1981
American Academy of Dermatology-40th Annual Meeting	Aug. 8, 1981
Intensive Residency in Occupational Medicine, Session III	Sept. 7-18, 1981
Miniresidency in Occupational Medicine, Occupational Dermatoses	Jan. 10, 1980
Pharmacology 210 Toxicity Testing Method-Sensitization	Feb. 11, 1980
Clinical Pharmacology Seminars - Ex. and Clin. Models,	Apr. 8, 1980
Dermatopharmacology and Dermatotoxicology	
Intensive Residency in Occupational Medicine, Session I	Sept. 10, 1980
Intensive Residency in Occupational Medicine, Session I	Sept. 17, 1980
Occupational Medicine Residency Course #129, #130	Sept. 1981
Intensive Residency in Occupational Medicine, Session II	Mar. 16-27, 1981
University of Calif. at San Diego	March 2, 1981
Environmental/Occupational Health Seminar	
UCSD School of Medicine - Elective in Occupational Health	Spring 1981
A profile approach to your skin and body	
Intensive residency in Occupational Medicine III	Sept. 7-18, 1981
UCSF-Chemically induced dermatoses in Ophthalmology	March 13, 1981
The Clinical Pharmacology-Pharmacokinetics Seminars	January 4, 1979
Miniresidency in Occupational Medicine-"Occupational Dermatoses"	1979-1980
UCSF-Third Annual Postgraduate Course in Medical Mycology	Sept. 15-17, 1980
Treatment of Dermatophytoses & Candidosis	
UCSF-ACM 110 - Summer II, II, 1980	July 7, 1980
UCSF-Pharmacology 296 and 210 for fall quarter	June 18, 1981
Journal Club	1965-1992
Teaching Rounds	1975-present
Pharm. 170.9	1/19, 2/27, 3/1/84
Intensive Residency in Occupational Medicine I: Dermatology	Aug. 25, 1982
Intensive Residency in Occupational Medicine II: Phototoxicity	Sept. 14, 1982
Intensive Residency in Occupational Medicine III: Chemical Hair Loss	Sept. 14, 1982
Medical School Lectures: "Introduction to Dermatology"	Nov. 2, 1982
Pharmacology 211: "Dermatotoxicology"	
Chemically Induced Contact Dermatitis: Morphology,	Oct. 12, 1983
Epidemiology and Diagnosis	
Chemically Induced Skin Irritation	Oct. 19, 1983
Dermatitis from Systemic Exposure to Chemicals: Contact Urticaria	Nov. 9, 1983
Pharmacy 154: Clinical Implications	1984-present
Intensive Residency in Occupational Medicine	Feb. 13-24, 1984
Occupational Dermatology	
Irritation: Biological Approach	
Contact Allergy: Practical Approach	
Intensive Residency in Occupational Medicine I	Feb. 11-22, 1985
Intensive Residency in Occupational Medicine II	Oct. 14-25, 1985
Intensive Residency in Occupational Medicine III	Feb. 17-28, 1986
Occupational & Environmental Medicine Grand Rounds:	Oct. 2, 1986
"Pre-employment Dermatologic Testing"	
6th Postgraduate Course, Medical Mycology:"Mucocutaneous Candidosis"	Oct. 12, 1986
Intensive Residence in Occupational Medicine, Occupational Derm.	Feb. 13, 1987

"Irritation: Biological Approach"	
"Contact Allergy: A Practical Approach"	
Industrial Toxicology, Med. 180: "Dermatologic Toxicology"	Oct. 16, 1991,
Center for Occupational & Environmental Health, SF General	Oct. 1, 1992 & Nov. 18, 1993
Grand Round Lecture Series, "Occupational Dermatology"	Jan. 7, 1992, Jan.
Division of Occupational & Environmental Medicine, UC Davis	6, 1994
Infectious Diseases Grand Rounds, Div. of Infectious Disease, UCSF	Mar. 16, 1992
Environmental Health Grand Rounds, "Advances in Occupational Therapy"	May, 27, 1992
Center for Occupational & Environmental Health, SF General	
Staff Conferences, "Glove Hypersensitivity", UCSF Dept. of Dermatology	June 3, 1992
Lecture: "Dermatology: Sensitivity/Reactivity", UCSF Occup. & Environ. Medicine	Jan. 29, 1993
Lecture for Occupational Medicine Fellows	July 12 & 14,
Center for Occupational & Environmental Health, SF General	1993
Medical Grand Rounds, "Psoriasis Syndrome: 19th Century Morphology to 21st Century Molecular Biology", UCSF	Aug. 12, 1993

### SERVICE TO PATIENTS

Founder and Chief, Patch Test Clinic, UCSF	1963-present
Founder and Chief, Psoriasis Clinic	1962-present
Dermatology Ward Consultant, UCSF - 3 mos./year	1961-1975
Consulting Dermatologist, UCSF - one-half day/week	1961-1975
Founder and Chief, Occupational Dermatology Clinic	1984

### LECTURES

Travel Abroad	Oct.-Nov., 1977
Kaiser Permanente Medical Center - "Industrial Occupational Disease"	June 8, 1978
Seventh Annual California Chapter, Society of Cosmetic Chemists, Scientific Seminar - "Cosmetics Toxicology: Beneath your Skin"	Sept. 26, 1978
Noah Worcester Dermatological Society-"Pharmacokinetics of Topical Corticosteroids: Relevance to Clinical Practice, and Office Diagnosis of Diseases of the Hair"	
Joint Meeting of the Dermatology Staff, Dallas County Hospital District, Dallas Dermatological Society and the Fort Worth Dermatological Society: Directions in Dermatopharmacology	Nov. 28, 1978
Society for Occupational and Environmental Health	Dec. 10-13, 1978
American Academy of Dermatology	Dec. 4-6, 1978
Patch Test Clinic - Pitfalls in Patch Testing	
Cosmetics Symposium - Hair Dye - A Carcinogen?	
Controversies in Dermatology - Topical Antibiotics - YES!	
Tokyo - The Profile and Historical Approach to DermatoToxicology and Dermatopharmacology	Nov. 15, 1978
Osaka -The Profile and Historical Approach to Dermatotoxicology and Dermatopharmacology	Nov. 18, 1978
University of San Francisco, Graduate School, Toxicology Dept. "Dermatitis and Dermatotoxicology"	Dec. 4, 1978



International Symposium on the Treatment of Psoriasis-Arthritis	Nov. 18-25, 1979
Tenth Conference on Environmental Toxicology	Nov. 13-15, 1979
Update on Dermatology and Rheumatology for the Practicing Physician: What to do about falling hair; Acne Vulgris and other Bacterial Infections of the Skin: New Concepts in Managemen	Nov. 4, 1979
Southern Medical Association Section on Dermatology Clinical Meeting Las Vegas	Nov. 4, 1979
Dept. of the Army - "Dermatoses of Relevance to the Nurse" given to the occupational health nurses	August 17, 1979
1979/Scientific/Regulatory Conference & Exhibit: Safety Testing for Decision Making	Oct. 16, 1979
The Westwood Western Conference on Clinical Dermatology Clinical Implications of Percutaneous Absorption, Topical Steroids	Oct. 14 - 16, 1979
Western Occupational Health Conference-Skin Transport of Toxic Materials	Oct. 11-13, 1979
The Fourth Annual Meeting of the American Dermatologic Society for Allergy and Immunology	Sept. 27-29, 1979
Alaska Cruise Seminar Scientific Program	July 29, 1979
The Toxicology Forum - Third Annual Meeting: Theoretical Aspect, Related to Delayed Contact Hypersensitivity	June 13, 1979
Dermatological Nursing A Practical Approach to Common Skin Disease X408.5 - Contact Dermatitis	June 28-29, 1979
The New Jersey Seminar In Dermatology - Dermatopharmacology; Corticoid Pharmacokinetics; Dermatotoxicology; Controversies in Clinical Cutaneous Microbiology; Psoriasis - A Systemic Disease?	June 7-10, 1979
State Compensation Insurance Fund: "Occupational Dermatoses"	May 17, 1979
Wadsworth VA Hospital Medical Center: "Advances in Cutaneous Microbiology"	May 11, 1979
Annual Meeting Southeastern Dermatological Association: "Hair Office Management," "Psoriasis - What's New"	May 5-6, 1979
Academy of Pharmaceutical Sciences - Pathobiology: Influence of Disease on the State of the Skin	April 23, 1979
Society of Cosmetic Chemists - The Twenty Minute Test, and Dermatotoxicology: Part I	April 20, 1979
Primary Care-Current Management of Common Office Problems Dermatologic Therapy for Primary Care Physicians	Feb. 7-10, 1979
Symposium: Contact Dermatitis and related environmental dermatoses	Sept. 26, 1979
Wayne State Medical School - "Advances in Dermatopharmacology"	May 9, 1979
Palm Beach Dermatological Society - "Peculiarities of Patch Testing"	March 14, 1980
First Annual Arnold Schwartz Memorial Program: Perspectives in Lanolin Dermatitis	Dec. 9, 1980
The Third CIIT Conference on Toxicology/Formaldehyde Toxicity: Effects of Formaldehyde on Skin	Nov. 21, 1980
The Florida West Coast Society of Dermatology Quarterly Meeting: Advances in the Exogenous Dermatoses	Nov. 11, 1980
Symposium on the Evaluation of Preparations for Topical Therapy: Skin Penetration-skin metabolism; Choice of preservatives 1980; Irritant properties of local applications	Oct. 25, 1980

The Twenty-First Annual Advanced Seminars in Dermatology: Use of Antibacterial Agents in Dermatology	Sept. 24-28, 1980
The Fifth Annual Meeting of the American Dermatologic Society for Allergy & Immunology: Contact Dermatitis: Dermatologic Advances in Patient Care	Sept. 25-27, 1980
Third Annual Postgraduate Course in Medical Mycology: Treatment of Dermatophytoses; Candidosis	Sept. 15, 1980
New Trends in Allergy-International Symposium: The irritable skin syndrome - alias, the angry back	Aug. 2, 1980
Division of Pesticide Chemistry-Second Chemical Congress: Percutaneous Penetration of Agricultural Chemicals	Aug. 25-29, 1980
International Conference - The Water Environment: Algal Toxins and Health/Wright State University: The Scientific Method in Diagnosing Algal Dermatoses	June 29, 1980
International Symposium Principles of Cosmetics for the Dermatologist Deodorants and Antiperspirants; Hair Products; Adverse Reactions to Cosmetics	May 1-3, 1980
Annual Scientific Seminar/Scientific Session III: Adverse reactions to hair products: What's so special?	May 15-16, 1980
Downstate Medical Center: Exogenous Dermatoses: Facts and Perspectives	April 2, 1980
Bluefarb Lecture at Northwestern University Medical School	April 16, 1980
Annual Meeting of the Central States Dermatological Society	April 1980
The Cleveland Clinic Educational Foundation: Contact Dermatitis; Patch Test Clinic	April 21, 1980
The University of Connecticut Health Center: Mechanisms of Exogenous Dermatoses	April 2, 1980
Royal Prince Alfred Hospital: Dermato Clinical Allergy	March 8, 1980
Research Conference and Workshop on Minimizing Occupational Exposure to Pesticides: Occupational Dermatitis	Feb. 21, 1980
Cosmetics in Dermatology: Irritation and Allergy	Feb. 29, 1980
Advances in Diagnosis & Management of Common Dermatoses: Therapeutic Pearls	Feb. 2, 1980
Primary Care Dermatology: Contact Dermatitis, A Common Cause of Skin Disorders	Feb. 15, 1980
Hawaii Dermatology Seminar-4th Annual Seminar: Advances in the Office Management of Contact Dermatitis; Dermatopharmacology	Feb. 19, 1980
The 22nd Annual Advanced Seminars in Dermatology	Sept. 16-20, 1981
Sonoran Dermatology Society - Summer Conference - Contact Dermatitis Update; Contact Dermatitis as it pertains Particularly to Women at home and at work	July 26, 1981
International Psoriasis Symposium Topical corticosteroids - The effect of short term occlusion on the cutaneous flora in psoriasis: incidence and density determinations-Thioguanine for psoriasis.	July 13-17, 1981
Mid-America Toxicology Course	Apr 26-May 1, '81
International Society for Skin Bioengineering and the Skin Water content in stratum corneum measured by a focused microwave probe: Normal and psoriatic. S. L. Jacques, H.I. Maibach, et al.	July 22-24, 1981
The First American-International Conference on Clinical Dermatology	June 14-18, 1981

Bacterial Infections; Topical Steroids	
Round Table Conference: Basic Mechanisms in Acne, in Relation to Therapy	June 15, 1981
South Carolina Dermatological Association-Current Concepts in the	May 16, 1981
Contact Urticaria Syndrome: Contact Hives to Anaphylaxis;	
The Excited Skin Syndrome and Exogenous Dermatoses.	
University Alabama Medical School-Exogenous Dermatoses: Office	May 15, 1981
Management	
Oklahoma State Dermatologic Society Meeting-Urtication: ICV & NICV	Jan. 15, 1981
Central Ohio Derm. Soc.: Urticaria-New Approaches	Sept. 23, 1981
International Symposium: Psoralens in Cosmetics and Dermatology	Apr. 13-15, 1981
Society of Cosmetic Chemists: Vehicle Toxicology	April 10, 1981
Dermatology Consultant's Course — Psoriasis: Cutaneous or Systemic	March 10, 1981
Disease; Chemotherapy: Indications in Dermatology	
Fifth Annual Valley of the Sun Dermatologic Symposium: Cutaneous	March 4-8, 1981
Pharmacology; Cutaneous Toxicology	
American Academy Allergy Seminars: Contact Dermatitis & Patch Testing	March 11, 1981
Sacramento Valley Dermatologic Society: Exogenous Dermatoses	Feb. 22, 1981
Advances I, Exogenous Dermatoses Advances II	
American Academy of Allergy: Contact Dermatitis and Patch Testing	Mar. 9-11, 1981
Nevada Academy of Family Physicians: Dermatology	Jan. 27, 1981
Alameda County Health Care Services: "Psoriasis for the Internist"	Jan. 16, 1981
IBM International Toxicology Symposium Houston, TX: Dermatotoxicol.	Nov. 1, 1983
Duke University Medical Center	
Exogenous Dermatoses	Jan. 12, 1984
Cutaneous Physiology	Jan. 13, 1984
Medical Grand Rounds, Highland General Hospital, Oakland	Jan. 20, 1984
Dermatologic Diagnosis & Treatment	
11th Annual Meeting American Society of Derm. Surgery, Hawaii	Feb. 15-19, 1984
Rational & Traditional Use of Antibiotics on Skin	
International Symposium of European Society for Dermatological	Mar. 16, 1984
Research, Wales, UK, Chair of Session 3	
International Symposium of European Society for Dermatological Research:	
Is there an animal model for human percutaneous penetration?	Mar. 15, 1984
Italian Society of Dermatology	
"Contact Urticaria in Infants" Milan	April 2, 1984
"Contact Urticaria in Infants" Messina	April 3, 1984
"Contact Urticaria in Infants" Bari	April 5, 1984
Occupational Skin Disease Symposium, King's College, Cambridge	April 6, 1984
Contact Urticaria Syndrome: Occupational & Non-occupational	April 8, 1984
American Chemical Society, St. Louis, Missouri	April 8, 1984
Overview of Pesticide Absorption	
Transdermal Absorption Kinetics: A Physiochemical Approach	April 8, 1984
Ortho Lecture Series, New Jersey	May 10, 1984
Adventures in Dermatotoxicology for Consumer, Scientist,	
Industry, and Government	
Texas Dermatological Society: Exogenous Dermatoses: Copenhagen,	May 12, 1984
San Francisco, and Fort Worth, 1984	

Current Trends in Mycology: New Developments in Diagnosis & Treatment, Los Angeles: Cutaneous Manifestations of Fungal Disease	May 15, 1984
State Water Resources Control Board Seminar, Sacramento Percutaneous Penetration from Public Water Supplies	May 16, 1984
Polyphenols Group, Bulgaria (Plenary Lecture) Furocoumarins: therapeutic aspects; dermatologic applications	May 31, 1984
17th Annual Oregon Dermatologic Society, Sun River, Oregon Tertiary Care Dermatology: Dermatobiology	July 14, 1984
Tertiary Care Dermatology: Dermatopharmacology	July 15, 1984
UCLA--Clinical & Basic Science Lectures, Dermatology	July 17, 1984
Hoechst-Roussel Pharmaceuticals Lecture Series, New Jersey The Vagaries & Practicalities of Delivering Drugs and Poisons Through Your Skin	July 19, 1984
Alta California Meeting, Lake Tahoe Normal Flora of the Skin and Eyelid	Sept. 8, 1984
Bacterial Infections of the Skin and Eyelids	
American Dermatologic Society for Allergy & Immunology, Boston Differentiation of Allergy from Irritation	Sept. 15, 1984
7th Annual Meeting of Pennsylvania Academy of Dermatology Exogenous Dermatitis (seminar in depth)	Sept. 21, 1984
Dermatopharmacology 84	Sept. 22, 1984
Fifth Postgraduate Course in Medical Mycology, San Francisco Mucocutaneous Candidosis	Oct. 21, 1984
Morning Panel Moderator	Oct. 21, 1984
American Academy of Dermatology — 43rd Annual Meeting	Dec. 1-6, 1984
United States Army Environmental Health Agency Seminar Chloracne — Patch Testing	Jan. 21, 1985
International Pharmaceutical R & D Symposium, Rutgers University, NJ Assessments of Dermatotoxicity Potential	June 20-21, 1985
National Medical Association, Las Vegas, Nevada Is It Really Black and White?	July 20-25, 1985
Soc. Cosmetic Chemists Symposium on Ethnic Skin & Hair, Chicago Medical Differences in Skin Response Among Caucasians, Orientals, and Blacks	Sept. 4, 1985
45th International Congress of Pharmaceutical Sciences of F.I.P. VII. Symposium: The Skin: Local Delivery and Systemic Activity	Sept. 5, 1985
Perspectives of Dermal and Transdermal Drug Delivery	
Society of Cosmetic Chemists, Golden Gate Chapter (SF) Cosmetics and Skin Biology	Sept. 12, 1985
2nd International Symposium on Pediatric Dermatology, Italy Pediatric Allergic Contact Dermatitis: Facts & Myths	Sept. 20, 1985
Controlled Release Dosage Forms: Issues & Controversies, Wash.DC New Routes of Administration & Effects on Compliance	Oct. 1, 1985
6th CIRD Symposium "Advances in Skin Pharmacology" Sophia Antipolis Toxicity After Topical Administration	Oct. 4-6, 1985
American Academy of Family Practice, Anaheim, CA Practical Office Approaches to Exogenous Dermatitis	Oct. 12, 1985
Shanghai First Medical College, Shanghai, People's Republic of China	Oct. 20, 1985

Toxicology of Topical Drugs Xian Medical College, Xian, People's Republic of China	Oct. 22, 1985
Dermatopharmacology I Capital Medical College, Beijing Medical College, Beijing, PRC	Oct. 24, 1985
Dermatopharmacology II Hong Kong College of General Practitioners, Hong Kong	Oct. 30, 1985
Advances in Exogenous Dermatoses Hong Kong Dermatologic Society, Takshing House, Hong Kong	Oct. 31, 1985
Toxicology of Topical Drugs Society of Cosmetic Chemists Scientific Symposium, New Cosmetic Frontier	Nov. 12, 1985
Bioengineering of Skin and Cosmetics: Facts & Fantasies S.F. Hypertension Council/UCSF Cardiology Division	Nov. 22, 1985
Dermatological Considerations with Clonidine Panel: Is Once-A-Week Transdermal Therapy the Answer	
Veterans Administration Dermatology Grand Rounds, Martinez, CA	Jan. 23, 1986
Practical Office Ramifications of Dermatotoxicology Mardi Gras Dermatology Update, New Orleans, LA. Contact Dermatitis	Feb. 5-7, 1986
and Steroids & Other Inflammatory Drugs in 1986 10th Annual Hawaii Dermatology Seminar	
Dermatopharmacology & Dermatotoxicology	Feb. 18, 1986
Dermatotoxicology	Feb. 22, 1986
Methotrexate for Advanced Psoriasis (Symposium), Hawaii	Feb. 20, 1986
The Pharmacology of PUVA and Retinoid Therapy Bioengineering Seminar, Colloquium of UCB and UCSF	Feb. 24, 1986
Bioengineering in Dermatology Metropolitan Dermatological Society of Los Angeles	Feb. 25, 1986
Odysseys & Events in the Life of an Exogenous Dermatologist Northern California Parasitologists	Mar. 7, 1986
A Dermatologist's View of Cutaneous Infestations UC Berkeley School of Public Health	Apr. 1, 1986
Visiting Professor, Hopital General de Montreal	May 6, 1986
The Psoriasis Syndrome - What Is It? Visiting Professor, Third Annual Minnetonka Lecture	May 12-13, 1986
63rd Atlantic Dermatological Conference, Scientific Program	May 9-11, 1986
Advances in the Exogenous Dermatoses (May 9) American Dermatological Assoc., 106th Annual Meeting, W. Virginia	May 23-28, 1986
Contact Urticaria Syndrome: All Is Not What It Seems 1986 Gordon Conference: Drug Carriers in Biology & Medicine, New	July 7-11, 1986
Hampshire, USA - "The Dermal Barrier to Local and Systemic Drug Delivery"	
4th International Congress of Toxicology, Tokyo, Japan	July 21-25, 1986
Advances in Percutaneous Penetration of Relevance to Toxicology"	
Grand Rounds, Naval Hospital, San Diego	Aug. 11, 1986
Advances in Dermatopharmacology Occupational Medicine Course of USAEHA, Aberdeen Proving Ground	Aug. 18-20, 1986
Dermatologic Aspects of Occupational Medicine G.E.R.D.A. Conference on Dermato-Allergologie de Contact	Sep. 10-13, 1986
Practical Ramifications of Excited Skin Syndrome	

Scandinavian Society of Cosmetic Chemistry, Denmark Irritant and Allergic Reactions to Cosmetics	Sep. 12, 1986
Basic Pharmaceuticals Research Workshop, Ardsley, NY Structure/Activity Relationships in Man Predictive Quality of Animal Models in Relation to Human Models	Sep. 15, 1986
1st Annual Amer. Assoc. of Pharm. Scientists, Workshop Principles & Practices of In Vitro Percutaneous Penetration Studies as Relates to Bioavailability & Bioequivalence Human Models for Evaluation of Efficacy & Toxicity	Oct. 31-Nov. 1,'86
Annual Conference. on Occupational Health: Advances in Occupational Dermatology 1986	Nov. 10-14,
Advances in Topical Anti-Inflammatory Therapy Symposium, Princeton, NY: Update on Topical Steroid Therapy	Dec. 3, 1986
Amer. Acad. of Dermatology: "What is Perioral Allergic Dermatitis?" Panel: Stump the Experts, Bacterial and Fungal Surprises Workshop: Preventive Dermatology-A Reality Forum: Geriatric Dermatology Patch Test Forum: Beware of the False Negative, "When to and When Not to Patch" "ACD, PACD, PT - All the Parts of the Sunscreen Hypersensitivity Syndrome", "Pharmacokinetics Aid Topical Efficacy"	Dec. 6-11, 1986
Orange County Derm. Society "Corticoid Dermatopharmacokinetics"	Jan. 21, 1987
Dept. of Industrial Environmental Health Sciences, Univ. of Pittsburgh Allergic Contact Dermatitis - Experimental and Clinical Findings	Jan. 27, 1987
11th Ann. Hawaii Derm. Seminar "Dermatopharmacology I" "Derm II"	Feb.20&22, 1987
Amer. Derm. Assoc. Meeting "Contact Leukoderma"	Feb.28, 1987
Dept. of Dermatology, Stanford Univ. Med. Ctr: "Dermatopharmacokinetics"	Feb.10, 1987
"The Science of Patch Testing"	Mar.17, 1987
CA Med. Assoc.,Anaheim, "Contact Dermatitis:Clinical Highlights"	Mar. 8, 1987
Stanford U. Derm. Resident Teaching: "The Science of Patch Testing"	Mar. 17,1987
Amer. Acad. of Veterinary Dermatology, Phoenix, AZ "Allergic Contact Dermatitis to Cat Litter: Real or Imagined?:"	Mar. 21,1987
U.S. Army Environmental Hygiene Agency "Dermatologic Aspects of Occupational Medicine"	Mar. 30,1987
Emory Univ. Dept. of Dermatology - "Advances in the Exogenous Dermatoses" "Principles of Percutaneous Absorption"	
Miami Dermatological Society Meeting "A Scientific Approach to Dermatopharmacokinetics" "A Clinical Approach to Exogenous Dermatoses"	Apr. 16,1987
28th Ann. Adv. Seminars in Derm. "Adventures in Exogenous Dermatoses"	May 8, 1987
Twenty-Eighth Annual Advanced Seminars in Dermatology, Palm Springs "Adventures in the Exogenous Dermatoses"	May 9, 1987
2nd Int'l. Meeting on Cosmetic Dermatology, Rome, Italy "Influence of Hydration on Percutaneous Absorption" "Vehicle Effects on Percutaneous Absorption"	May 20-21, 1987
Amer. Assoc. of Pharmaceutical Scientists, Boston, MA "Human Testing of Irritation and Sensitization: Techniques and Mechanisms"	June 8, 1987

Arnold & Marie Schwartz College of Pharmacy & Health Sciences, Long Island Univ. Seminar on Bioavailability "Establishing Product Bioequivalence for Dermatologic Drug Products"	June 12, 1987
XIth European Congress of Rheumatology, Athens, Greece "General Aspects Important for the Percutaneous Transportation of Drugs"	July 2, 1987
Amer. Acad. of Derm. - "Dermatopharmacology of Dermatotoxicology"	July 18, 1987
12th Annual Gen. Meeting & Scientific Meeting of Dermatological Soc. of Malaysia - "A Dermatologic View of Cosmetics - Efficacy & Toxicity Part I"	Aug. 30, 1987
"A Dermatologic View of Cosmetics - Effic. & Tox. Part 2"	
Dermatological Society of Singapore - "Contact Dermatitis - Recent Developments", "Dermatotoxicology - Methods of Testing Irritancy and Percutaneous Absorption"	Aug. 30, 1987
Amer. Chemical Society, New Orleans, LA "Role of Percutaneous Absorption in Human Chemical Exposure"	Sep. 1, 1987
"Balanced Study Design on Percutaneous Absorption on Rhesus"	
Children's Hospital Dermatology/Medicine/Pediatrics Conference "Contact Dermatitis"	Sep. 9, 1987
Amer. Dermatologic Society for Allergy & Immunology 12th Annual Meeting, Toronto, Ontario - "What is Hand Eczema?"	Sep. 19, 1987
Annual Conference on Occupational Health, San Francisco "Work-Related Skin Disease"	Oct. 20, 1987
UCSF Endocrinology Conference, Seminar	July 16, 1991
Clinical Perspective on Contact Dermatitis, Dept. of Dermatology, Stanford University and American Contact Dermatitis Society, Hotel Meriden, San Francisco, "False Positives & False Negatives, and How to Prepare or Obtain Non-Standard Allergens" and "Ask the Experts"	July 19 & 20, 1991
Work/Family/Health Series, Bechtel Corporation, "Your Skin and the Chemical Environment"	Sept. 16, 1991
The Establishment of Bioavailability and Bioequivalence of Dermatological Products, Dermatological Therapeutic Products II, Amer. Assoc. of Pharmaceutical Scientists, co-sponsored by US FDA, "Approaches in Bioavailability and Bioequivalence - IV: Clinical Studies"	Dec. 3, 1991
Avances en el Diagnóstico y Tratamiento de las Enfermedades del Cabello, Mexican Academy of Dermatology, "Anatomía, Fisiología y Factores que Afectan las Caída Normal o Anormal del Cabello" & "Productos Cosméticos Para el Cuidado del Cabello, sus Ingredientes Activos y Función"	1991
Topical Administration Of Drugs, Swedish Academy Pharmaceutical Sciences, Stockholm, Sweden, "Skin Absorption of Drugs" and "Cutaneous Adverse Reactions to Transdermal Delivery Systems: Mechanisms and Prevention"	Jan. 27-29, 1992
Development of In Vitro Alternatives for Dermal Irritation Testing, Industrial In Vitro Toxicology Group, Cincinnati, Ohio, "Integration of Human Dermal Irritation Data with Validation of In Vitro Methods"	May 22, 1992
Colorado Society for Dermatologic Surgery, "Dermatotoxicology in Office Practice"	June 1, 1992
Methodologies and In Vitro Applications for Organotypic Skin Culture Models, World Congress, New York, NY, "Opening Remarks" for In Vitro Applications Session	June 12, 1992
Challenges in Contact Dermatitis, A Symposium Presented by the American Contact Dermatitis Society, Louisville, KY, "What is 'Sensitive Skin' (& What Can I Do About It)?"	June 26-27, 1992
Latin America Hair Care Symposium, Caracas, Venezuela, "Hair Anatomy & Physiology, Cycles, Hair Loss, etc."	June 29, 1992

Japanese Dermatology Society, The Role of Skin in Transdermal Delivery, Tokyo, "Dermatotoxicology of Transdermals: Prediction and Reality"	July 9, 1992
Advanced Seminars in Dermatology, 33rd Annual University of California, "The Sensitive Skin Syndrome: Identification and Management"	July 30-Aug. 2, 1992
Clinical Conferences Summit Medical Center, Oakland, CA, "Advances in Dermatologic Therapy"	Sept. 1, 1992
Department of Dermatology, University of Minnesota, MN, "Psoriasis Syndrome: What Is It", "Quantitative Dermatopharmacology" and "The Irritation Syndrome: A Perspective"	Sept. 9, 1992
Dermatology Section, John Muir Medical Center, "Clinical Advances in Dermatology: Personal Perspective"	Sept. 10, 1992
16th World Congress of the International Union of Angiology, Paris, France, "Cutaneous Microcirculation in Normal and Pathological Situations"	Sept. 13-18, 1992
Hautpermeation von Pharmaka, Technical Institute, Basel, Switzerland, "Approaches in Bioavailability and Bioequivalence:	Sept. 14, 1992
Massachusetts Academy of Dermatology, Annual Meeting, "Environmental Dermatoses" and "Psoriasis Syndrome"	Sept. 18, 1992
Pacific Dermatologic Association, 44th Annual Meeting, Palm Desert, CA, "Contact Dermatitis"	Sept. 16-20, 1992
Allergy Association of Northern California, San Francisco, "Latex Hypersensitivity"	Sept. 23, 1992
Environmental Safety Laboratory, Colworth, U.K., "Sensitive Skin: Risk and Reality"	Oct. 6, 1992
Society of Toxicology, Mid-Atlantic Chapter, Fall Symposium, Somerset, NJ, "Advances in Percutaneous Absorption: The Role of Soil and Possibilities of Decontamination"	Oct. 14, 1992
Drug Eruptions and Patch Testing, European Contact Dermatology Society, "Legitimization of the role of CMI in Drug Eruptions"	Oct. 10, 1992
National Conference on Environmental Hazards to the Skin, Washington, DC, "The Skin as a Major Portal of Entry for Man-Made Hazards"	Oct. 15-16, 1992
International Society of Bioengineering Skin, 9th Meeting, Sendai, Japan, "Bioengineering and the Skin: Legitimate and Illegitimate Science"	Oct. 19, 1992
Research Institute of TTS Technology, Japan, "Irritant Dermatitis and Transdermals: Biology and Prevention"	Oct. 1992
Southern California Pharmaceutical Discussion Group, "Topical Drug Delivery"	Oct. 29, 1992
Advances in Occupational & Environmental Medicine, UCSF Postgraduate Programs, Miyako Hotel, S. F., "Practical Skin Testing"	Nov. 6, 1992
Grand Rounds Conference, Kaiser Permanente, "Latex Hypersensitivity"	Nov. 6, 1992
American College - Allergy & Immunology, "Exogenous Dermatoses: Science & Joy"	Nov. 14, 1992
Biometrics of the Skin, Society of Cosmetic Chemists, New York, NY, "Why Biometrics-Legitimate & Illegitimate Uses," "Skin Structure and Function," "Simplified Experimental Design in Man" and "The Future"	Dec. 2, 1992
Committee to Review the Health Effects in Vietnam Veterans Exposure to Herbicides, Institute of Medicine, National Academy of Sciences, Irvine, CA	Feb. 8, 1993
Hawaii Dermatology Seminar, Pre-Seminar Meeting, Lanai, HI, "OSHA Regulation - What it Means to the Dermatologist"	Feb. 16-19, 1993
Hawaii Dermatology Seminar, 17th Annual, Big Island, HI, "Therapeutic Hotline", "The Biology of Occlusion"	Feb. 19-24, 1993



Hawaii Dermatology Seminar, 17th Annual, Big Island, HI, Oral Antibiotics in Dermatology, A Symposium, "Soft Tissue Infections"	Feb. 23, 1993
Society of Toxicology, 1993 Symposia, "Metal Allergic Contact Dermatitis (ACD) and Contact Urticaria Syndrome (CUS): A Risk Assessment"	March 1993
The American Dermatological Association, Inc. 130th Annual Meeting, Rancho Mirage, CA, "When Should Dermatologists be Comfortable with Topical Generics? - The Bioequivalence Controversy"	March 9, 1993
Conference on Clinical Dermatology, Medicis Dermatologics, Inc., Phoenix, AZ, "Advances in Office Management of Environmental Dermatoses" and "Generics vs. Innovator Drugs: Fact and Fantasy"	March 20, 1993
Percutaneous Penetration Symposium, Percutaneous Absorption & Pharmacological/Toxicological Effects, Montpelier, France, "Introduction"	April 1993
Mountain Medicine Lectures, Mountain Medicine Institute, Sierra Club, U.S. Coast Guard, American Trauma Society, U.S. Navy & Explorer's Club, " Hazards of the Biological Environment, Part I: Bites & Stings, and your Skin"	Apr. 7, 1993
Prediction of Percutaneous Penetration, Third International Conference, La Grande Motte, France, "Percutaneous Absorption and Pharmacological/ Toxicological Effects"	Apr. 14-16, 1993
Regional Meeting of the International Society for Bioengineering and the Skin, Lübeck, Germany, "Guest Lecture: Sensitive Skin: A Biologic Perspective", Chair of Dermatopharmacology Session,	Apr. 23-25, 1993
Alza Corporation, Palo Alto, CA, "Biology of Irritant Dermatitis"	May 3, 1993
Dermatop, Hoechst, Prague, Czech Republic	May 14, 1993
"Kontaktní urtikarie - minulost, přítomnost, budoucnost"	
Israel Dermatology Society, Tel Aviv, "Contact Dermatitis: A Re-evaluation for the Year 2000" and "Dermatopharmacology: Can Topical Corticosteroids be Improved?"	May 24, 1993
Symposium Satellite: Avances en Dermocorticoterapia, Eficacia y Seguridad en Armonia, XXII Congreso Nacional de Dermatología y Venerología, Schering-Plough, S.A., Granada, Spain, "Eficacia y Seguridad de Memetasona"	May 28, 1993
Society of Toxicology, "Immunomodulation of Metals"	June 2, 1993
Brown Bag Lectures, UCSF, "Must Your Skin Deteriorate"	June 9, 1993
Practical Patch Testing: How to Help Patients with Patch Tests, American Contact Dermatitis Society, New Orleans LA, "Testing with Non-Standard Substances"	Jul. 31, 1993
Dermatology for the Non-Dermatologist, Continuing Medical Education Assoc., with San Diego State Univ. Student Health Services, San Diego, CA "Everything You Ever Wanted to Know About Acne and Rosacea" & "Urticaria and Other Common Causes of Itching"	Aug. 10, 1993
Clinical Medicine lecture, Meiji College of Oriental Medicine, San Francisco CA	Aug. 28, 1993
Curso Internacional de Terapeutica Dermatologica 1993, Universidad de Chile, San Cristóbal, Chile, "Terapia de las Verrugas - Realidad v/s Anécdotas," "Bloqueadores Solares", "Corticoides Tópicos: Enhancing Efficacy," "Acitretin-Sulfasalazina" and Talleres Simultaneos panel	Sep. 3-4, 1993
Horizons Guest Lecture Series, Kimberly-Clark Corp., Roswell, GA, "Nonwovens, Fabrics and Human Skin: Tolerance and Intolerance"	Sept. 7, 1993
Skin Toxicology and Pharmacology — In Vitro and Clinical Techniques, The 2nd Annual New Technologies Workshop, Micorbiological Assoc., Bethesda, MD, "Skin Irritation: In Vivo and In Vitro Observations"	Sept. 9, 1993

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Skin Irritation Workshop, John Hopkins School of Hygiene & Public Health, Baltimore, MD, "Human Skin Irritation & In Vitro-In Vivo Correlation"	Sept. 20, 1993
Third Congress of the European Academy of Dermatology & Venereology, Copenhagen, Denmark, Chair of Irritant Contact Dermatitis	Sept. 26, 1993
31st Wissenschaftlichen Kolloquium, Paul Gerson Unna-Forschungszentrum, Hamburg, Germany, "Prevention of Irritant Dermatitis-Subclinical Level"	Sept. 30, 1993
American College of Toxicology, 14th Annual Meeting, New Orleans, LA, "Human Epidemiology and Assays"	Oct. 5, 1993
Annual Dermatology Symposium, Kaiser Permanente, Los Angeles, CA, "Current Issues in Dermatology"	Oct. 9, 1993
Insight '93 International Conferences, Kalamazoo, MI, "Fabric and Your Skin: Tolerance and Lack Thereof"	Oct. 18, 1993
8th Annual Dialogues in Cosmetic Dermatology, Sponsored by Northwestern University Medical School, San Diego, CA, "Cosmetics and Sunscreen Intolerance" & "Cosmetics in Post Surgical Patient" with Z. Draelos & V. L. Rayner	Oct. 29, 1993
American College of Allergy & Immunology "Materials and Methods to Diagnose Contact Dermatitis"	Nov. 14, 1993
Skin <sup>2</sup> TM, Scientific Mini-Symposium Focusing on In Vitro Testing Using Engineered Human Tissue, Advanced Tissues Sciences, Baltimore, MD, "	Nov. 16, 1993
The Los Angeles Metropolitan Dermatological Society, Inc. "Fantasies and Realities of Dermatologically-Induced Acne"	Nov. 23, 1993
OCAC Seminar, FDA, Washington, DC, "SAR Studies in the Elucidation of Allergic Contact Dermatitis. Comments Concerning Subclinical (Sensory) Skin Irritation"	Dec 1, 1993
Alexander A. Fisher lecture, 5th Annual Meeting, American Contact Dermatitis Society, Washington, DC, "Contact Urticaria: Infancy to Pubescence"	Dec. 3, 1993
Continuing Education Program, Society of Cosmetic Scientists, New York, Taught: "Skin Bioengineering & Applied Biometrics: Efficacy and Toxicity"	Dec. 8, 1993
Fifth International Symposium on Performance of Protective Clothing: Improvement Through Innovation, San Francisco, CA "The Significance of Dermal Permeation of Industrial Chemicals"	Jan. 25, 1994
Clinique et Policlinique de Dermatologie et de Vénéréologie, Hopital Cantonal Universitaire de Geneve, "Topical Corticoids: Fact and Too Much Fantasy"	April 13, 1994
Second International Symposium on Irritant Contact Dermatitis (ISICD), Zürich, Switzerland "Biology of Irritant Dermatitis in 1994"	Apr. 14-16, 1994
Medical Aspects of Cosmetics, Berzelius Symposium XXVII, Stockholm, Sweden "Sensitive Skin Syndrome", "Percutaneous Absorption: Its Role in Cosmetics"	June 7, 1994
Finnish Society of Allergology and Immunology "The Contact Urticaria Syndrome"	March 22, 1996
Gothenburg Addendum III: Course "What's New" Irritant contact dermatitis syndrome	May 30, 1998
University of Santo Tomas, 263rd Dr. Luis E. Guerrero Memorial Lecture, "Contact Dermatitis & Skin Function in the Elderly", Philippines Appointed Visiting Professor	Feb 19, 1998

## PUBLIC SERVICE

Howard I. Maibach, M.D.

Military Service, U.S. Army, Captain, 1955-1958; with additional training in Neuropsychiatry at Walter Reed Army Hospital	July-Nov.1956
Member, Commonwealth Club	1961-1964
Food and Drug Administration lecture "Cosmetic Ingredient Toxicity Profiles - Relevant or Not?"	Feb. 14, 1978
San Francisco Chapter of the National Psoriasis Foundation lecture: What is new in drugs today, such as methotrexate, etc.	1978
USPSH - Alaska Native Hospital, Alaska Lecture: Principles of Dermatopharmacology	July 12, 1979
Co-Chairperson, Investigative Dermatology Study Group for the Dept. of the Army	1979
Department of the Navy lecture	July 14, 1980
Bureau of Drugs Seminar Lecture	April 7, 1981
International Psoriasis Treatment Center-Dead Sea	
International Scientific Advisory Committee of this Symposium	Nov. 22-29,1981
Consultant-lecturer to Department of the Navy, Naval Hospital, San Diego	FY 1984
Consultant to the Department of the Army, Letterman Hospital	10-1-83 - 9-30-84
Member, Immunology/Sensitization/Irritation Panel of Consensus Workshop on Formaldehyde; Executive Office of the President, Office of Science and Technology Policy, Washington, D.C.	1984
National Research Council, Commission on Life Sciences, member Subcommittee for Vol.3:"Possible Long-Term Effects of Chemical Agents Morbidity Evaluation"	Mar. 1, 1984 - Apr. 30,1985
Member, Technical Advisory Panel on Allergic Sensitization, U.S. Consumer Product Safety Commission, Washington, D.C.	1984
Member, Subtask Force on the Role of Immune and Host Defense National Institute Environmental Health Sciences	Mar.- June, 1984
Food and Drug Administration Orphan Products Development Review Group	1984
Acid Deposition Research Project, Government of Alberta, Canada	Jan. 23-26, 1984
Food and Drug Administration Orphan Products Development Review Group	1985
U.S. Environmental Protection Agency, Peer Review and Quality Assurance	7/1/85-present
Honorary Member,Groupe d'Etudes et de Recherches en Dermato-Allergologie (G.F.R.D.A.)	Sept. 16, 1985
Consultant to Pacific Northwest Resources Clinic	1985-present
Duke University Medical Center, ADA Honorary Membership Committee	1985-present
Department of Health and Human Services (U.S.)Reviewer: FDA Report on Color Additives	1985
Women's American ORT Luncheon Meeting. "Men, Women, Maturing Skin"	Jan. 13, 1986
National Institute of Health, Special Study Section	1986
International Society of Cosmetic Dermatology, Advisory Panel	Dec. 1986
Affiliate, California Primate Research Center	1987-present
External Examiner: Eric Smith	1987
American Academy of Dermatology Task Force on Occupational and Environmental Dermatology	Jan.'87-Dec.1990
National Research Council, Committee on Toxicology, Army Environmental Health Agency (AEHA) Arthropod Repellent Subcommittee	June'86-July 1987
Organizing Committee, Northern California Chapter, Society of Toxicology	
Consultant to the AMA's <u>Drug Evaluations (DE)</u> , sixth edition	1993

American Academy of Dermatology Task Force on Occupational and Environmental Dermatology	Jan. '87 - Dec. '90
National Research Council, Committee on Toxicology, Army Environmental Health Agency (AEHA) Anthropod Repellent Subcommittee	June'86-July 1987
Organizing Committee, Northern California Chapter, Society of Toxicology	July 1993
Candidate's Thesis Review, M.D. Candidate, National University of Singapore	March 1, 1994 - March 1, 1995
Consultant, Immunotoxicity Workgroup, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency (OEHHA, Cal/EPA)	1994
Organizing Committee, Second International Symposium on Irritant Contact Dermatitis (ISICD), Zürich, Switzerland, Apr. 14-16, 1994	Apr. 1994 - present
Working Group on SLS/twenty-four hours/TEWL Patch Test Technique, The Standardization Group of the European Society of Contact Dermatitis	June 6, 1994
Chair of June 6, 1994 Morning Session, Medical Aspects of Cosmetics, Berzelius Symposium XXVII, Stockholm, Sweden	Aug. 1994 - June 1997
Congress Ambassador, 19th World Congress of Dermatology, Sydney, Australia, to be held June 15-21, 1997	Mar' 95-Mar'96
American Contact Dermatitis Society, chair of the Editorial and Publications Committee	May'95-present
Risk Assessment Advisory Committee, California Environmental Protection Agency (OEHHA, Cal/EPA)	June 1995
Grant Review for, The Center for Alternatives to Animal Testing(CAAT)	1998-present
Current Drugs, Ltd, Panel of Evaluators	1998-present
FDA Panel, "Topical Dermatological Drug Product NDAs and ANDAs- In Vivo Bioavailability, Bioequivalence, In Vitro Release, and Associated Studies"	Sep 98-Sep 98
Advisory Panel Member, DOD Commission on Engineering and Technical Systems of the National Research Council	1999
Peer Reviewer, U.S. Environmental Protection Agency's (EPA) Peer Review Panelist Information System (PRPIS)	Feb
Member, Task Force on International Standards on Immunotoxicity of Medical Devices	1999
Reviewer, Drug Information for the Health Care Professional for U.S. Pharmacopeia	Oct 1988
Member, Test Method Peer Review Panel for the Murine Local Lymph Node Assay	
Interagency Coordinating Committee on the Validation of Alternative Methods	

## HONORS

1st Award, 1961 Essay Competition, American Dermatological Association	1961
Literature Award, Society of Cosmetic Chemists	1973
Honorary Member, Swedish Dermatologic Society	1974
Honorary Member, American Veterinary Dermatologic Association	1974
Panel Member, Distinguished Lecturers in Dermatology, Lederle Laboratories	1976
Honorary Member, Danish Dermatological Society	1977
Honorary Member, German Dermatologic Society	1979
Honorary Member, Finnish Dermatologic Society	1981
Honorary Member, Polish Dermatologic Society	1981

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1970 New York Society of Cosmetic Chemists, Charter Award for paper entitled: Perfume Phototoxicity (co-author - Dr. Francis N. Marzulli); presented at local chapter meeting, American Hotel, New York City	Sept. 8, 1971
American Academy of Dermatology, Miles Lectureship	1982-1983
Honorary Member, Israel Dermatologic Society	1984
Best Paper, presented 10th International Symposium on Controlled Release of Bioactive Materials, San Francisco	1984
Honorary member, Groupe D'Etudes et de Recherches en Dermato-Allergologie	
Department of the Army, Commander's Award for Public Service	
Honorary Member, Hellenic Society of Dermatology & Venereology	April 1987
Doctor Honoris Causa of Paris Sud University	June 1987
Honorary Member, Dutch Society for Dermatology & Venereology	Nov. 1987
Verleihung des Grünenthal-Förderpreis, Haut und Umwelt	Oct. 1992
"Discrimination of the Irritancy Potential of Surfactants In Vitro by two Cytotoxicity Assays Using Normal Human Keratinocytes, HaCaT Cells and 3T3 Mouse Fibroblasts: Correlation with In Vivo Data from a Soap Chamber Assay", with Dr. med. Thomas Angerpointner, et al.	
Honorary Foreign member of The Dowling Club	March 1995
Honorary member, The Finish Society of Allergy and Immunology	March 1996
Finnish Dermatological Society Award: "Medal in Honour of distinguished dermatologists	July 1998
Heinz Maurer Prize for Dermatology Research with the theme "Skin Surface and Environment in Clinical Research" to Herrn Gil Yosipovitch, M.D. and with co-authors Glen L. Xiong, E. Haus, Linda Sackett-Lundeen, I. Ashkenazi and Howard I. Maibach for the title "Time Dependent Variations of the Skin Carrier Function in Humans: Transepidermal Water Loss, Stratum Corneum Hydration, Skin Surface pH and Skin Temperature.	1998

#### EDITORIAL ASSIGNMENTS

Board of Editors, International Journal of Dermatology	1974-present
Editorial Board, Contact Dermatitis: Environmental Dermatology	1974-present
International Editorial Board, Excerpta Medica, Sec. B	1976-present
Editorial Board, Clinical Toxicology	1976-present
Thesis Examiner at U C Davis - Environmental Toxicology	1979-present
Editorial Board, Recent Advances in Dermatology	1981-1983
Reviewer for the American Pharmaceutical Association	1981-present
Editor, Seminars in Dermatology	1981-present
Editorial Board, Archives Dermatologic Research	1981-present
Editorial Board, Journal of Toxicology and Environmental Health	1981-present
Editorial Board, Berufs Dermatosen	1981-present
Editorial Advisory Board, Core Journals in Dermatology	1982-present
Editorial Advisory Committee, Excerpta Medica	1982-present
Reviewer of Hospital Formulary (Sec. 84:00 & 72:00)	1983-1984
Editorial Consultant, BIOSIS Four Year Term	1983-1987
Editorial Board, Journal of Toxicology & Industrial Health	1983-present

"Further member", Zeitschrift für Hautkrankheiten "H&G"	1984-present
Editorial Committee, Bioengineering and The Skin, quarterly	1985-1989
Editorial Board, Epithelia	
Editorial Board, A Dentists Medical Digest	1985-1992
DI Reviewer, USP	1987-1988
Editorial Board, Drug Investigation	1989-present
Editorial Board, Drugs (Adis Press, New Zealand publisher)	1990
Editorial Board, American Journal of Contact Dermatitis	1990-1993
Editorial Board, Journal of Clinical Research & Pharmacoepidemiology	1990-present
Editorial Board, Iatrogenics	1990-present
Editorial Board, International Journal of Clinical Pharmacology & Toxicology	1990-present
Editorial Board, Food & Chemical Toxicology	1991-present
Honorary Editorial Board, Bollettino di Dermatologia Allergologicae Professional	1991-present
Associate Editor, The Journal of Dermatological Treatment	1991-present
Editorial Board (Scientific Consultant), Les Nouvelles Dermatologiques	1991-present
Editorial Advisory Board, The Agromedicine Journal	1991-present
Editorial Board, Journal of the European Academy of Dermatology and Venereology	1992-present
Editorial Board, Inpharma (Adis Press, New Zealand)	1992-present
Honorary Editorial Board, Drugs & Therapy (Adis Press, New Zealand)	1992-present
Reviewer, Case Studies Workbook for the Handbook of Nonprescription Drugs, 10th edition, American Pharmaceutical Association	1992-present
Consultant to the American Medical Association <u>Drug Evaluations (DE)</u> , 6th edition	1993-present
Editorial Board, H&G Zeitschrift für Hautkrankheiten	1993-present
Editorial & Publications Committee, American Contact Dermatitis Society	1993-present
Editorial Board, Skin Pharmacology	1993-present
Special Associate Editor, Skin and Ocular Toxicity	1994-present
Advisory Panel, <u>Case Studies Workbook</u> for the <u>Handbook of Nonprescription Drugs</u> , 11th edition, American Pharmaceutical Association	1994 March -present
Editorial Board, Associate Editor, International Journal of Dermatology	1994-present
Scientific Board, Journal of Skin Research and Technology	1995-present
Editorial Board, Skin Therapy Letter	1995-1996
Reviewer for American Pharmaceutical Association, Handbook of Nonprescription Drugs(OCT11)	July 1995
Editorial Board, European Journal of Medical Research	March 1995
Editorial Board, Journal of Applied Toxicology	June 96-present
Editorial Board, Journal of Toxicology and Environmental Health: B Critical Reviews	June 1997-2000
Editorial Board, Editor, "Journal of Dermatopharmacy"	1998
Editorial Board, Journal of Pharmacy and Pharmacology"	October 1997-2000
Editorial Consultant, "Clinical Therapeutics"	1997- present
Editorial Board, "Clinical Toxicology"	1997-present
Editorial Board, "Journal of Pharmacy and Pharmacology"	1997-2000
Editorial Board, "Journal of Applied Cosmetology"	1998-present
Editorial Board, "Journal of Toxicology and Environmental Health"	1998-present
Advisory Board, "American Journal of Contact Dermatitis"	1998-present

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Reviewer, Chapter 33: "Insect Sting and Bite Products", Handbook of Nonprescription Drugs. American Pharmaceutical Association 1999 - 2000

### MEMBERSHIP IN SCIENTIFIC SOCIETIES

American Academy of Dermatology	1961-present
San Francisco Dermatological Society	1961-present
Secretary-Treasurer	1966-1967
President	1970-1971
Pacific Dermatologic Association	1961-present
Society for Investigative Dermatology	1961-present
New York Academy of Sciences	1961-1985
California Medical Association	1962-present
Scientific Board, House of Delegates	1969-1972
Committee on California Medicine	1969-1972
Committee on Environmental Health	1970-1973
Advisory Panel to the Section on Dermatology	1972-1974
American College of Physicians	1964-present
American Federation for Clinical Research	1964-present
American Medical Association	1964-present
Consultant for <u>Drug Evaluations</u> , 6th edition	1993-present
San Francisco Medical Society	1964-present
American Society for Clinical Pharmacology & Therapeutics	1967-1995
American Dermatological Association	1969-present
International Society of Topical Dermatology	1971-present
Charter Membership, American College of Toxicology	
DATTA (Diagnostic and Therap. Technical Assessment)	1982-present
Advisor to Japanese Society for Cutaneous Health	1983-present
Fellowship, The Academy of Toxicological Sciences	1992
International Society for Digital Imaging of Skin (ISDIS), Board of Directors	1992-present
International Society for Digital Imaging of Skin (ISDIS), Honorary Membership	1993
International Commission on Occupational Health (ICOH)	
Scientific Committee on Occupational Dermatoses	
Honorary Member, American Contact Dermatitis Society	
Diplomate, American College of Forensic Examiners and American Board of Forensic Medicine	1999 - present

### PRESENT RESEARCH PROJECTS- (Brief outline)

1. Dermatopharmacology
2. Dermatotoxicology
3. Psoriasis

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4. Exogenous dermatoses

Also, please see attached list of the most recent publications.